

11. A semiconductor processing chamber comprising:
  - a wall, a bottom and a lid assembly defining a chamber volume;
  - a substrate support disposed within the chamber volume; and,
  - a chamber liner disposed in the chamber volume and circumscribing the substrate support, the chamber liner having a passage at least partially disposed in the chamber liner, the passage fluidly isolated from the chamber volume and having an inlet and outlet adapted to flow a fluid through the passage.
12. The chamber of claim 11 wherein the chamber liner further comprises at least one of:
  - a first liner disposed proximate the lid assembly; or
  - a second liner disposed about the substrate support.
13. The chamber of claim 11 wherein the chamber liner is retained in the chamber by a clamp affixed to the chamber.
14. The chamber of claim 11 wherein the chamber liner is comprised of a thermally conductive material.
15. The chamber of claim 11 wherein the chamber liner is comprised of a material selected from the group of aluminum, ceramic and stainless steel.
16. The apparatus of claim 12 wherein the second liner further comprises:
  - a base having the passage disposed within; and
  - an inner wall connected to the base.
17. The apparatus of claim 16 wherein the second liner further comprises:
  - an outer wall connected to the base.
18. The apparatus of claim 16 wherein the second liner further comprises:

a first and second boss projecting from the base, the first boss comprising a hole in fluid communication with the passage at the inlet, and the second boss comprising a hole in fluid communication with the passage at the outlet.

19. The apparatus of claim 16 wherein inner wall further comprises a magnet disposed in the inner wall.

20. The apparatus of claim 17 wherein the outer wall further comprises a pumping port.

21. The apparatus of claim 12 wherein the first liner further comprises:  
a center member having the passage disposed within;  
a flange circumscribing the center member; and,  
a cylindrical wall projecting from the center member inside of the flange.

22. The apparatus of claim 21 further comprising:  
a lid disposed opposite the cylindrical wall, the lid and the wall defining a plenum at least partially therebetween.

23. The apparatus of claim 22 wherein the center member further comprises:  
a plurality of nozzles disposed in the center member providing fluid access to the plenum.

24. The apparatus of claim 22 further comprising:  
a gas feedthrough fluidly coupled to the plenum through a hole disposed in the lid.

26. Apparatus for lining a semiconductor processing chamber comprising:  
a liner having a plurality of apertures formed at least partially therein;  
a lid having an inlet, the lid disposed proximate the liner and defining a plenum at least partially therebetween; and

a nozzle disposed in at least one of apertures.

27. The apparatus of claim 26, wherein the nozzle is comprised of quartz, silicon carbide, silicon, aluminum nitride, aluminum oxide or combinations thereof.

28. The apparatus of claim 26, wherein the liner further comprises:  
a channel having an inlet and an outlet disposed in the liner.

B1 37. (Amended) The apparatus of claim [25] 26, wherein the second side of the liner is textured.

38. Apparatus for lining a process volume defined by sidewalls of a semiconductor processing chamber comprising:

a liner adapted to be removably disposed in the process volume; and

a passage at least partially formed in the liner isolated from the process volume and adapted to flow a heat transfer medium therethrough.

39. The apparatus of claim 38, wherein the liner further comprises:  
a cylindrical wall.

40. The apparatus of claim 39, wherein the passage is formed at least partially in the cylindrical wall.

41. The apparatus of claim 39, wherein the liner further comprises:  
a bottom coupled to the cylindrical wall.

42. The apparatus of claim 41, wherein the passage is formed at least partially in the bottom.

43. The apparatus of claim 39, wherein the cylindrical wall is configured to line the sidewalls to the chamber.

44. The apparatus of claim 39, wherein the cylindrical wall is configured to line a substrate support disposed in the process volume of the chamber.
45. The apparatus of claim 38, wherein the liner further comprises:  
an outer cylindrical wall;  
an inner cylindrical wall; and  
a bottom coupled between the outer cylindrical wall and the inner cylindrical wall.
46. The apparatus of claim 45, wherein the passage is formed in at least partially in at least one of the inner cylindrical wall, outer cylindrical wall and the bottom.
47. A semiconductor processing chamber comprising:  
a wall, a bottom and a lid assembly defining a chamber volume;  
a substrate support disposed within the chamber volume; and,  
a chamber liner having at least a first portion disposed proximate the wall, the chamber liner having a passage fluidly isolated from the chamber volume at least partially formed in the chamber liner.
48. The chamber of claim 47, wherein the chamber liner further comprises:  
a second portion disposed proximate the lid assembly.
49. The chamber of claim 48, wherein the second portion of the chamber liner further comprises:  
a plurality of apertures formed therethrough.
50. The chamber of claim 49 further comprising a plate disposed on the chamber liner and forming a plenum therewith, the plenum in fluid communication with the chamber volume through the apertures.
51. A semiconductor processing chamber comprising: